DEPARTMENT of ENVIRONMENTAL SERVICES Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BRAGG POND	Lake Area (ha):	4.49
Town: MILLSFIELD	Maximum depth (m):	2.5
County: Coos	Mean depth (m):	0.6
River Basin: Androscoggin	Volume (m³):	26500
Latitude: 44°45'58" N	Relative depth:	1.0
Longitude: 71°15'11" W	Shore configuration:	1.36
Elevation (ft): 1707	Areal water load (m/yr):	415.6
Shore length (m): 1020	Flushing rate (yr^{-1}) :	701.5
Watershed area (ha): 3194.2	P retention coeff.:	0.01
<pre>% watershed ponded: 2.4</pre>	Lake type: arti	ficial

BIOLOGICAL:	10 August 1999
DOM. PHYTOPLANKTON (% TOTAL) #1	MELOSIRA 40%
#2	MICROCYSTIS 8%
#3	ASTERIONELLA 7%
PHYTOPLANKTON ABUNDANCE (units/mL)	
CHLOROPHYLL-A (µg/L)	12.32
DOM. ZOOPLANKTON (% TOTAL) #1	BOSMINA 54%
#2	NAUPLIUS LARVA 17%
#3	CYCLOPOID COPEPOD 13%
ROTIFERS/LITER	16
MICROCRUSTACEA/LITER	614
ZOOPLANKTON ABUNDANCE (#/L)	647
VASCULAR PLANT ABUNDANCE	Sparse
SECCHI DISK TRANSPARENCY (m)	1.7
BOTTOM DISSOLVED OXYGEN (mg/L)	8.3
BACTERIA (E. coli, #/100 ml) #1	
#2	
#3	

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

CHEMICAL:	BRAGG POI		
	10 1	August 199	99
DEPTH (m)	1.0		2.0
pH (units)	7.0		6.6
A.N.C. (Alkalinity)	8.7		7.0
NITRATE NITROGEN	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN			
TOTAL PHOSPHORUS	0.018		0.011
CONDUCTIVITY (µmhos/cm)	28.2		28.3
APPARENT COLOR (cpu)	31		30
MAGNESIUM	0.67		
CALCIUM	3.2		
SODIUM	1.5		
POTASSIUM	< 0.40		
CHLORIDE	< 2		< 2
SULFATE	2		2
TN : TP			
CALCITE SATURATION INDEX	2.9		

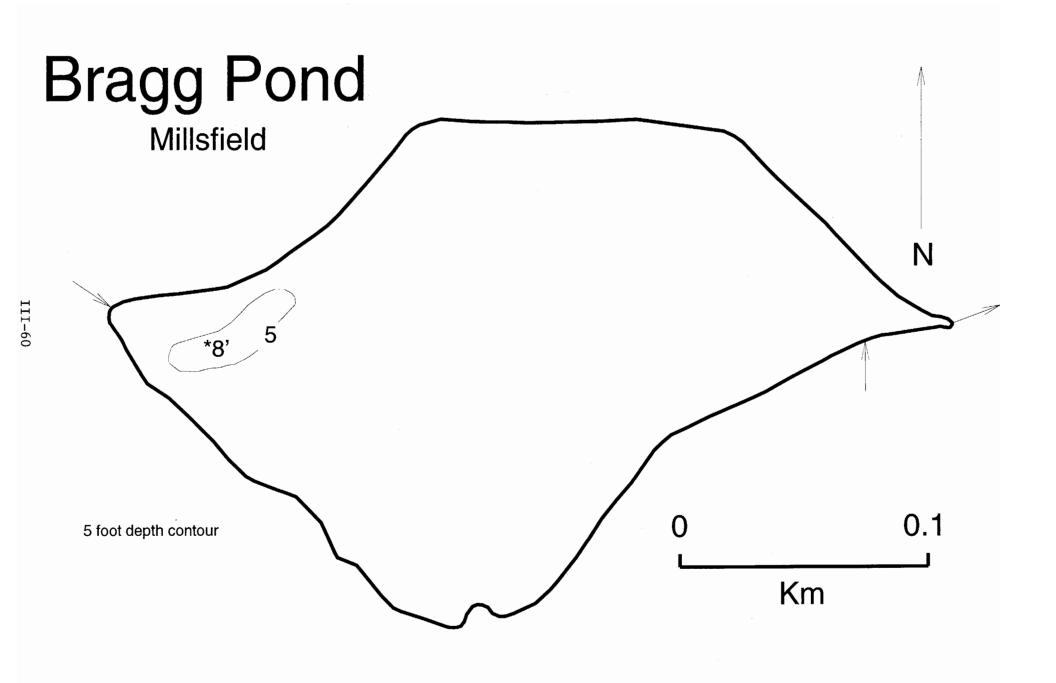
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1999

•	D.O.	s.D.	PLANT	CHL	TOTAL	CLASS
	**	4	0	3	7	Meso.

COMMENTS:

- 1. This is a relatively remote pond located up a 4-wheel drive road. In the DES list of official public waters, Bragg Pond is listed as 'dam in ruins less than 9 acres'. We found a 10 or 11 acre pond (perhaps beaver activity?).
- 2. This pond was not sampled during the winter.



FIELD DATA SHEET

LAKE: BRAGG POND

DATE: 08/10/1999

TOWN: MILLSFIELD

WEATHER: BREEZY, COOL

DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	15.8	9.0	91 %
0.5	15.8	8.6	85 %
1.0	15.5	8.5	84 %
1.5	15.5	8.5	83 %
2.0	15.4	8.3	81 %
		·	

SECCHI DISK (m): 1.7

COMMENTS:

BOTTOM DEPTH (m): 2.5

TIME: 1050

*Dissolved oxygen values are in mg/L

AQUATIC PLANT SURVEY LAKE: BRAGG POND DATE: 08/10/1999 TOWN: MILLSFIELD PLANT NAME ABUNDANCE Key **GENERIC** COMMON Gramineae Grass family Scat/Common b Scirpus Bulrush Sparse Dulichium arundinaceum Three-way sedge Sparse С Carex Sedge Sparse

OVERALL ABUNDANCE: Sparse

GENERAL OBSERVATIONS:

- 1. This is a very shallow pond but the plant growth was sparse.
- 2. A good variety of phytoplankton at least 22 different genera were present.